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Hewlett-Packard Company			HENN, TIMOTHY J	
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			2612	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<i>'</i>	Application No.	Applicant(s)			
	09/729,704	BROWN ET AL.			
Office Action Summary	Examiner	Art Unit			
	Timothy J Henn	2612			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 06 De	ecember 2000.				
	action is non-final.				
· <u> </u>					
closed in accordance with the practice under E					
Disposition of Claims					
4) ☐ Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-12 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 06 December 2000 is/a Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Examine	re: a) \square accepted or b) \boxtimes object drawing(s) be held in abeyance. Setion is required if the drawing(s) is obtained.	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received. s have been received in Applicati ity documents have been receive u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)	_ :				
1) M Notice of References Cited (PTO-892) 2) Motice of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summary Paper No(s)/Mail D				
2) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2</u> .		Patent Application (PTO-152)			

Art Unit: 2612

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to because the hand drawn figures and labels are difficult to read. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Application/Control Number: 09/729,704 Page 3

Art Unit: 2612

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- 4. The office notes that specification heading labels such as "Background of Invention", "Brief Summary of the Invention", "Brief Description of Drawings" and "Detailed Description of the Preferred Embodiment" are missing and should be entered where it is deemed appropriate.
- 5. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.
- 6. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The office notes that no mention of the scanning feature is included in the title.

Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1, 4, 7 and 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403).

[claim 1]

Art Unit: 2612

- 9. In regard to claim 1, note that Fishbine et al. discloses an image capture apparatus such that the apparatus comprises a combined electronic camera and scanner (Figure 7), the electronic camera (Figure 7, Item 20) having an associated optical system (Figure 7, Item 60) and detector array for remote capturing of a first image (Figure 7, Item 62; Column 8, Lines 18-20) and the scanner (Figure 7, Item 18) having an associated optical system (Figure 7, Item 70) and detector array for scan capturing of a second image (Figure 7, Item 72; Column 6, Line 60 Column 7, Line 13); and a memory arranged to store the first image and the second image (Column 2, Lines 33-38; Column 8, Lines 10-17). It can be seen that Fishbine et al. lacks a memory which stores the first image and the second image in association with each other.
- 10. However, the office notes that in the alternate embodiment in lieu of a transmitter to transmit both images, the two images are stored so that they can latter be transmitted. In such identification imaging systems it is well known in the art to store multiple identification images in association with each other to avoid mixing information about a persons appearance and their fingerprints (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the digital camera image which represents a suspects appearance and the fingerprint scanner image which represents the suspects fingerprints in association with each other to avoid confusion caused by the mixing of appearance and fingerprint images of multiple suspects.

[claim 4]

Art Unit: 2612

11. In regard to claim 4, note that Fishbine et al. further discloses a display (Figure 1, Item 26).

[claim 7]

12. In regard to claim 7, note that Fishbine et al. further discloses a data output arranged to output from the apparatus the first image and second image in association with each other (Column 2, Lines 33-38; Figure 1, Item 30).

[claim 12]

- 13. Claim 12 is a method claim corresponding to apparatus claim 1. Therefore, claim12 is analyzed and rejected as previously discussed with respect to claim 1.
- 14. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403) in view of the applicants admitted prior art.

[claim 2]

15. In regard to claim 2, note that Fishbine et al. discloses all limitations except for a color image sensor in the electronic camera and a grey-scale image sensor in the scanner. However, it is well known in the art to use color image sensors in electronic cameras to take full color photographs (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a color image sensor to take color photographs with the image capture apparatus of Fishbine et al. It is further noted that the applicants admitted prior art teaches the use of grey-scale image sensors in scanning devices to reduce cost (Page 1, Line 30 - Page 2, Line 10). Therefore, It would have been obvious to one of ordinary skill in the art at the

Page 6

Art Unit: 2612

time the invention was made to use a grey-scale image sensor in the image capture apparatus of Fishbine et al. to reduce cost.

16. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403) in view of the applicants admitted prior art as applied to claim 2 above, and in further view of Lafreniere (US 4,821,118).

[claim 3]

- 17. In regard to claim 3, note that Fishbine et al. in view of the applicants admitted prior art discloses all limitations except for a processor programmed for combining in registration the images with each other to form a composite image that combines in at least a portion of the composite colour from the first image with detail from the second image.
- 18. Lafreniere discloses a system which combines images of a persons palm and their appearance together into a single image (Figure 14, Item 132) using a video screen splitter (Figure 14, Items 128, 129) or "processor" which is then recorded for later viewing to confirm the persons identification (Column 1, Lines 6-11; Column 5, Lines 9-59). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the picture of the persons appearance and the scan of their fingerprint into a single image as taught by Lafreniere so that it can later be recalled and the persons identification can conveniently be confirmed.

Art Unit: 2612

19. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403) in view of Egawa (US 5,138,460).

Page 7

[claim 5]

- 20. In regard to claim 5, note that Fishbine et al. teaches the use of capturing a scene (Column 2, Lines 35-56) with the camera portion of the disclosed image capture apparatus. It is also noted that incorporating a panoramic functionality (i.e. taking multiple pictures and combining them together into a single larger picture), which is well known in the art, allows a user to photograph larger scenes than would be possible if only a single picture were taken (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include panoramic functionality in the camera portion of Fishbine et al. to take pictures of large scenes which would not be possible if only a single picture were taken. It can be seen that the panoramic image capture apparatus of Fishbine et al. teaches all limitations of claim 5 except for displaying a previously picked up image and a display of the image to be picked up (i.e. a live viewfinder) so that the user can capture the images with a desired orientation with respect to each other when displayed on the display.
- 21. Egawa teaches a camera system which displays a previously captured image along with an image which is to be picked up in order to allow the user to match the positions and orientations of previously taken images the image which will be taken next (Figure 1; Column 1, Line 44 Column 2, Line 18) to allow the photographer to smoothly connect images thereby ensuring high quality panoramic photographs. Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was

Application/Control Number: 09/729,704 Page 8

Art Unit: 2612

made to provide a display of an image to be taken (i.e. the first image) and a previously taken image (i.e. a previously taken second image) to allow the user to orient the camera to take images which properly correspond to each other when panoramic images of a scene with the camera portion of Fishbine et al.

22. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403) in view of Anderson et al. (US 6,097,431).

[claim 6]

- 23. In regard to claim 6, note that Fishbine et al. teaches all limitations except for displaying separately at the same time both the captured first and second images.
- 24. Anderson et al. discloses an image review system which displays a grid of previously taken images and allows the user to quickly review multiple images which have been previously taken (Figure 8; Column 2, Lines 47-59). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an image review grid as taught by Anderson with the image capture apparatus of Fishbine et al. to allow quick review of previously taken images.
- 25. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fishbine et al. (US 5,467,403) in view of the Abram et al. (US 6,462,778).

[claim 8]

Art Unit: 2612

26. In regard to claim 8, Fishbine et al. discloses all limitations except for the inputting of annotation data regarding the first or second image which is entered into the apparatus in association with the first and/or second image.

27. Abram et al. teaches the entering of image annotation data in the form of a filename to simplify the organization, indexing, sorting and retrieval of images (Column 1, Lines 18-30). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the input system of Fishbine et al. (Fishbine et al.; Column 3, Line 52 - Column 4, Line 22) to input image annotations as taught by Abram et al. to simplify the organization, indexing, sorting and retrieval of images.

[claim 9]

28. In regard to claim 9, note that Fishbine et al. discloses a pen-based interface or "electronic scribble pad" as a possible data input device (Column 4, Lines 12-15).

[claim 10]

29. In regard to claim 10, note that Fishbine et al. discloses a keypad interface (Column 3, Lines 52-60).

[claim 11]

30. In regard to claim 11, note that Fishbine et al. discloses all limitations except for an input device which is a microphone. However, Abram et al. discloses the use of a microphone to enter audio annotation data as an alternate embodiment (Column 4, Line 59 - Column 5, Line 17). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a microphone in the system of Fishbine et al. to allow the entering of audio annotation data as taught by Abram et al.

Art Unit: 2612

Double Patenting

31. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

32. Claims 1, 4, 7 and 12 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,663,332.

[claim 1]

33. In regard to claim 1 of the present application, note that both the present application and the '332 patent claim a digital camera ("a combined electronic camera and scanner" in claim 1 of the present application; "a conversion device configured to receive light" in claim 1 of the '332 patent) having an associated optical system ("the electronic camera having an associated optical system" in claim 1 of the present application; "a lens; a conversion device configured to receive light from said lens" in claim 1 of the '332 patent) and a scanner mechanism ("a combined electronic camera and scanner" in claim 1 of the present application; "a scanning mechanism" in claim 1 of

Art Unit: 2612

the '332 patent) which performs a scanning operation and stores the resulting image data (i.e. first set of data) with a picture (i.e. second set of data) taken by the digital camera portion in a memory in association with each other ("a memory arranged to store the first image and the second image in association with each other" in claim 1 of the present application; "a storage device; and a system controller configured to store said first set of digital data and said second set of digital data into said storage device" and "wherein said system controller is further configured to merge said first and second sets of digital data into a third set of digital data" in claim 4 of the '332 patent). However, it is noted that the '332 patent does not claim an optical system for the scanning device as is claimed in claim 1 of the application.

- 34. The office notes that providing a scanning device such as the one claimed in the application and the '332 patent with an optical system is well known in the art to better focus the scanned document onto the scanning sensor (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an optical system to better focus the scanned document on the scanning sensor of the '332 patent. It is further noted that the present application does not claim that the first and second sets of data are digital data, the function of scanning a document and a processing device to receive electrical signals from an image sensor and define the second set of digital data based on the electrical signals.
- 35. However, it is well known in the art to convert electrical signals readout from imaging devices, such as the electronic camera and the scanner of the present application into digital data using a processing device such as an analog-to-digital

converter to allow storage in digital devices such as flash memory cards (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to convert the image data of the present application to digital data using a processing device to store the data in flash memory or other such digital storage devices. It is also well known in the art to use scanning devices such as the scanner of present application to scan documents to allow digital storage of documents which provides the well known advantage of taking up less storage space than maintaining analog copies of the documents (Official Notice). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the scanning mechanism of the present application to scan documents to allow digital storage of the documents to use less storage space. Therefore, it can be seen that the present application and the '332 patent are obvious variants of one another.

[claim 4]

36. In regard to claim 4, note that the '332 patent claims all limitations except for a display for displaying one or both of the images. However, it is well known in the art to provide displays on image capture apparatus in order to provide the user with a review function to review previously taken images (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a display on the image capture apparatus of the '332 patent.

[claim 7]

37. In regard to claim 7, note that the '332 patent claims all limitations except for a data output arranged to output from the apparatus the first image and the second image

Art Unit: 2612

in association with each other. However, it is well known in the art to include data output means such as a USB interface or wireless connection in image processing apparatus to output stored image signals to external systems such as personal computer systems for further processing (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a data output on the image capturing device of the '332 patent to output the stored image signals to an external system for further processing.

[claim 12]

- 38. Claim 12 is a method claim corresponding to apparatus claim 1. Therefore, claim 12 is analyzed and rejected as previously discussed with respect to claim 1.
- 39. Claims 2 and 3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,633,332 in view of the applicants admitted prior art.

[claim 2]

40. In regard to claim 2, note that the '332 patent claims all limitations except for a color image sensor in the electronic camera and a grey-scale image sensor in the scanner. However, it is well known in the art to use color image sensors in electronic cameras to take full color photographs (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a color image sensor to take color photographs with the image capture apparatus of the '332 patent. It is further noted that the applicants admitted prior art teaches the use of

Art Unit: 2612

grey-scale image sensors in scanning devices to reduce cost (Page 1, Line 30 - Page 2, Line 10). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a grey-scale image sensor in the image capture apparatus of the '332 patent to reduce cost.

[claim 3]

- 41. In regard to claim 3 note that the '332 patent claims a processor for combining in registration the images with each other to form a composite image that combines in at least a portion of the composite image colour from the first image with detail from the second image ("system controller further configured to merge said first and second sets of digital data into a third set of digital data" in claim 4 of the '332 patent).
- 42. Claim 5 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,633,332 in view of Egawa (US 5,138,460).

[claim 5]

- 43. In regard to claim 5, note that the '332 patent claims all limitations except for displaying a previously picked up image and a display of the image to be picked up (i.e. a live viewfinder) so that the user can capture the images with a desired orientation with respect to each other when displayed on the display.
- 44. Egawa teaches a camera system which displays a previously captured image along with an image which is to be picked up in order to allow the user to match the positions and orientations of previously taken images the image which will be taken next

Art Unit: 2612

(Figure 1; Column 1, Line 44 - Column 2, Line 18). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to alter the system of the '332 patent to provide a display of an image to be taken and a previously taken image to allow the user to orient the camera to take images which properly correspond to each other.

45. Claim 6 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,633,332 in view of Anderson et al. (US 6,097,431).

[claim 6]

- 46. In regard to claim 6, note that the '332 patent claims all limitations except for displaying separately at the same time both the captured first and second images.
- 47. Anderson et al. discloses an image review system which displays a grid of previously taken images and allows the user to quickly review multiple images which have been previously taken (Figure 8; Column 2, Lines 47-59). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an image review grid as taught by Anderson with the image capture apparatus of the '332 patent to allow quick review of previously taken images.
- 48. Claims 8-11 are rejected under the judicially created doctrine of obviousnesstype double patenting as being unpatentable over claim 4 of U.S. Patent No. 6,633,332

Application/Control Number: 09/729,704 Page 16

Art Unit: 2612

in view of Abram et al. (US 6,462,778).

[claim 8]

49. In regard to claim 8, note that the '332 patent claims all limitations except for an input device for inputting annotation data regarding the first or second image which is entered into the apparatus in association with the first and/or second image.

Abram et al. teaches the entering of image annotation data in the form of a filename to simplify the organization, indexing, sorting and retrieval of images (Column 1, Lines 18-30). The office notes that the camera of Abram et al. must inherently include an input device to allow the user to "enter a descriptive name" (Column 1, Line 26). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an input device to input image annotations as taught by Abram et al. to simplify the organization, indexing, sorting and retrieval of images.

[claim 9]

50. In regard to claim 9, note that the '332 patent in view of Abram et al. discloses all limitations except for an "electronic scribble pad" input. However, it is well known in the art to use pen-based interfaces or "electronic scribble pads" as input devices because of their increased flexibility (Official Notice). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pen-based interface or "electronic scribble pad" as the input device to achieve a system with increased flexibility.

[claim 10]

Art Unit: 2612

51. In regard to claim 10, note that Abram et al. discloses an input device which is a keypad (Column 3, Lines 30-38).

Page 17

[claim 11]

52. In regard to claim 11, note that Abram et la. discloses an input device which is a microphone (Column 4, Line 59 - Column 5, Line 17).

Conclusion

53. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following prior art further shows the current state of the art in digital cameras with scanning functionality:

i. Nishiura US 5,708,515

ii. Silverbrook US 6,665,008

54. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J Henn whose telephone number is (703) 305-8327. The examiner can normally be reached on M-F 7:30 AM - 5:00 PM, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2612

312

Page 18

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TJH 4/30/2004

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